

REMARKS

Applicant respectfully traverses and request reconsideration. As a preliminary matter, Applicants wish to thank the Examiner for the notice that Claim 16 would be allowed if rewritten in independent form. Applicant's attorney wishes to thank Examiner Chauhan for the courtesy extended during the telephone conference of June 3, 2003.

Claims 1-9, 11-15 and 17-20 stand rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 5,850,323 (Engstrom et al.). Applicants respectfully reasserts the remarks made in previous responses and in an attempt to expedite prosecution, have amended independent claims 1, 11, and 13 to note that the write behind controller may be in, but not limited to, for example, a video graphics adapter (VGA), or any other suitable device (See Spec. page 4, lines 19-29).

Applicants respectfully submit that the claims are in condition for allowance in view of the Engstrom reference as cited, since, among other things, this reference appears to teach a display device interface to be a software module executing by the CPU. As noted also in Engstrom in Col. 4 and in Figure 2, the display device interface includes a layer of software referred to as the hardware abstraction layer (HAL) 54, and a layer of software referred to as the hardware emulation layer (HEL) 58. (Engstrom, col. 4, lines 36-58). For example, the display device interface 50 is a software interface (driver or application) executed by the CPU to support flipping of an image in a window using overlays. The display device interface 50 acts as an interface to display hardware such as video cards (Col. 6, ll. 13-14).

In contrast, Applicants claim, among other things, enabling, by a write behind controller in a video graphics adapter, storage of the image at a first memory location when the second memory location indicates raster accessed data at the first memory location, and preventing, by the write behind controller, storage of the image at the first memory location when the second memory location of the frame buffer indicates the raster has not accessed data at the first memory location. Moreover, Applicants claim using frame buffer memory that can be accessed by a rasterizer. As such, among other differences, the method requires using a hardware write

behind controller in a video graphics adapter, which by way of example may be included as part of a 3D rendering engine or may be part of a display device controller or other suitable structure. Moreover, Applicants claim that the write behind controller determines the memory locations in a frame buffer. For at least the reasons provided above these claims are not anticipated by Engstrom.

As to Claim 2, Engstrom, as cited describes generally controlling the operation of computer system and as such fails to describe receiving a rendering command from a system processor. Accordingly, this claim adds additional novel subject matter and is also allowable at least as depending from an allowable base claim.

As for Claims 6 and 7, Col. 7, lines. 17-25 of Engstrom have been cited. Since Claims 6 and 7 depend from Claim 1, Applicants respectfully reassert the relevant remarks made with respect to Claim 1. Further, the back buffer described in this section of Engstrom does not appear to be second memory location representative of a raster location and as such for at least these reasons these claims are not anticipated.

As to Claims 8 and 9, the Office Action cites Col. 4, lines 59-62 of Engstrom. However, these cited lines of Engstrom merely indicate that a 2D or 3D graphics engine is the display hardware. Applicants respectfully reassert the remarks made previously and submit that the cited portion does not describe how graphics primitives are provided to the graphics engine when the rendering engine is storing data to a frame buffer wherein the frame buffer is being accessed by a display device controller that is providing a current image. The claim further requires that the display device controller is at a point where it has not yet accessed an address location having data associated with a current image wherein that location is between the first two address locations such that the graphics primitive is provided to the rendering engine at this point. Typically, as previously stated with respect to prior art systems, the graphics primitive would not be submitted to a rendering engine at this point in time. Accordingly, this claim for at least these reasons is also believed to be in condition for allowance.

Claims 11, 12 and 17-20 stand rejected based on the same rationale for amended Claim 1. Applicants respectfully reassert at least the relevant remarks made above with respect to Claim 1. Accordingly, these claims are also believed to be in condition for allowance.

Claim 10 stands rejected under 35 U.S.C. § 103(a) based on Engstrom in view of official notice. Applicant respectfully reasserts the previous request that supporting reference be cited for each and every claim element if the rejection is maintained. Applicants respectfully submit that this claim adds additional novel subject matter and is also allowable at least as depending upon an allowable base claim.

Accordingly, Applicants respectfully submit that the Claims are in condition for allowance and that a timely Notice of Allowance be issued in this case. The Examiner is invited to telephone the below-listed attorney at 312-609-7970 if the Examiner believes that a telephone conference will expedite the prosecution of the application.

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